HYDROFORMED AXLE WITH WELDLESS BRAKE FLANGE AND BEARING SHOULDER

ABSTRACT OF THE DISCLOSURE

An axle assembly is provided that includes a tubular member having an outer wall and an interior cavity. The other wall includes a first interlocking feature. An axle component mounting member, such as a bearing shoulder sleeve and/or a brake flange, is arranged on a portion of the outer wall. The mounting member includes a second interlocking feature coacting with the first interlocking feature to affix the mounting member and tubular member to one anther. The axle assembly may be formed by arranging the axle mounting member into a die assembly. A tubular member may be arranged in the die assembly within an opening in the mounting member. A hydroforming process may be employed to pressurize a cavity within the tubular member. A portion of the tubular member is deformed into engagement with the mounting member to affix the mounting member to the tubular member.